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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/543,082	03/03/2006	Andreas Reinhard	27793-00099USPX	1172
61060	7590	03/03/2008		
WINSTEAD PC P.O. BOX 50784 DALLAS, TX 75201			EXAMINER HOOK, JAMES F	
			ART UNIT 3754	PAPER NUMBER
			MAIL DATE 03/03/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

SP

Office Action Summary	Application No. 10/543,082	Applicant(s) REINHARD ET AL.	
	Examiner James F. Hook	Art Unit 3754	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-9 and 11-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-9 and 11-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

The amendment filed February 11, 2008 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: describing the shape of the envelope as "lens shaped" is not clearly supported by the specification as originally filed, where it is not clear that "lenticular" is necessarily an equivalent to "lens" when referring to the shape of the envelope.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 20 and 24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. As set forth above, it is not clear that the specification as originally filed discloses necessarily a "lens shaped" envelope when

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such is defined as "lenticular" when there is no evidence provided that the two terms are in fact equivalent, therefore at this time such is considered new matter.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4, 8, 11, 13, 14, 19, and 21-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Shchervinsky. The reference to Shchervinsky discloses the recited anti-buckling device for insertion into a thin walled bendable fluid duct 120 which is provided with a device therein which can take the form of the embodiment of figure 4 shown as element 410 which is equivalent to element 110 of figure 1, the element 410 is provided with a plurality of ribs 430,440 which extend in a longitudinal direction of the anti-buckling device 410, the plurality of ribs are seen in figure 4 to have a height which varies in the transverse direction, the plurality of ribs having a maximum height near a center of the device, wherein space between adjacent ribs form grooves, the cross section of the device inherently fills the cross section of the duct in such a way that the duct walls lie on the plurality of ribs at a buckling point but cannot penetrate into the grooves based upon their shape such that the grooves would inherently remain open

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and permeable for fluids when the device is bent, fluids can circulate through the grooves and if necessary transmit pressure forces, the envelope of the device in at least a portion of a length of the device corresponds essentially to the cross section of the duct at the buckling point, the notches formed near 480 are interrupted portions of the ribs in the longitudinal direction, where grooves formed between arm 440 and the side arms which form a second portion of a groove are connected to one another transversely, the interrupted portion of the rib along edge 470 forms knobs there between notches 480, the grooves with the transverse connection form an intermediate space, the device is formed in such a way that at least one plastic pipe can be inserted in the device such as near where member 490 passes through the device, where such is capable of receipt of a plastic pipe thereby meeting the claim language, wherein the envelope essentially corresponds to the cross section of the duct along an entire length of the device, the thin walled duct is a hose, the device is deformable and inherently is adapted to adjust itself to deformations in a cross section of the hose, the device consists of an elastomeric material which is elastic, the width of the device is smaller than a corresponding part of the cross section of the duct at the buckling point and corresponds approximately to a width of the duct remote from the buckling point, the ribs are formed in such a way that they create an envelope that is shaped inherently such that it is capable of receipt of at least one plastic pipe as required by claim 21. Since it is believed that claim 21, as well as claim 4, only require the ribs be so shaped that they are capable of accommodating a pipe the such is not actually requiring or positively reciting a pipe therein, but merely setting forth what the shape of the ribs are

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in order to achieve a specific use, where it is considered that the reference teaches structure capable of meeting this intended use, however, such will also be considered in combination with teachings of another reference as well.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4, 5, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shchervinsky in view of Wooters. It appears that the reference to Shchervinsky teaches all of the recited structure as interpreted above, however, if it is considered that such does not recite grooves capable of accommodating a plastic pipe, then it would have been obvious to one skilled in the art to modify the ribs of Shchervinsky to accommodate a plastic pipe as suggested by Wooters that shows plastic pipes can be provided in 60,62,64 can be provided inbetween ribs 54a-h in a support device where such allows for a plurality of multiple sized tubes to be protected by the device thereby increasing it's value.

Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shchervinsky. The reference to Shchervinsky discloses all of the recited structure with the exception of stating the shore hardness of the material used, however, such is considered merely a choice of mechanical expedients where it would have been

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obvious to one skilled in the art to modify the rubber using routine experimentation to arrive at optimum values to provide the necessary strength and yet still remain flexible as such is merely a choice of mechanical expedients and obvious to use routine experimentation to arrive at optimum values based upon the environment in which the device is to be used.

Claims 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shchervinsky in view of Rains. The patent to Shchervinsky discloses all of the recited structure with the exception of forming the anti-buckling device with structure to support a reinforced plastic tube therein, and forming the ribs on the inside of the tube wall instead of on the anti-buckling device. The patent to Rains discloses that it is old and well known in the art to form an anti buckling device such as 92 with a plurality of longitudinal ribs which support and protect a thin walled pipe 11 from being blocked as the pipe is bent to keep flow passing through the space inside the pipe 11, where it is also known to form the spacer structure as ribs extending in from the pipe such as in figures 6 and 7, and where the anti-buckling device supports a pipe 10 therein which is thereby reinforced. It would have been obvious to one skilled in the art to modify the anti buckling device of Shchervinsky by providing structure to support and reinforce a tube therein the anti buckling device and that is equivalent to provide rib structure in the outer wall as well as suggested by Rains where such would allow for an additional tube to be added within the outer tube to improve flow there through by allowing another flow path for the fluid through the tube, and where such is equivalent structure as known in the art.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shchervinsky in view of Atwell. The reference to Shchervinsky discloses all of the recited structure with the exception of forming the thin walled conduit with a woven layer. The patent to Atwell discloses that it is old and well known in the art to form thin walled ducts with a woven fabric layer to provide some strength to the wall. It would have been obvious to one skilled in the art to modify the thin walled conduit in Shchervinsky by providing a woven layer to provide added strength as suggested by Atwell where such would prevent premature failure of the thin walled duct from rupture thereby saving money.

Claims 1, 7-9, 11, 13-17, 19, 20, and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Russo in view of Shchervinsky. The reference to Russo discloses the recited anti buckling device for a surgical drain comprising a device with a plurality of ribs 82 which have grooves provided there between to allow flow through the grooves which form an envelope, it is generally lenticular or lens-shaped and is made of an elastomeric material such as latex. The reference to Russo discloses all of the recited structure with the exception of providing such inside of a tube, and form the ribs of different heights, where it is considered that even if the overall device shape is not considered lens shaped such is merely a choice of mechanical design to change the shape of the device. It would have been obvious to one skilled in the art to use the device in Russo in a thin walled flexible tube and to provide different height ribs as suggested by Shchervinsky where such is an equivalent manner to use and form

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surgical drains. Also, the reference to Russo discloses all of the recited structure above with the exception of stating the shore hardness of the material used, however, such is considered merely a choice of mechanical expedients where it would have been obvious to one skilled in the art to modify the rubber using routine experimentation to arrive at optimum values to provide the necessary strength and yet still remain flexible as such is merely a choice of mechanical expedients and obvious to use routine experimentation to arrive at optimum values based upon the environment in which the device is to be used.

Claims 2, 3 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Russo in view of Shchervinsky as applied to claims 1, 7-9, 11, 13-17, 19, 20, and 22-24 above, and further in view of Nichols. The reference to Russo as modified discloses all of the recited structure with the exception of forming the ribs with interruptions to form knobs via tranverse connections. The patent to Nichols discloses the recited anti buckling device for thin walled ducts comprising in the longitudinal direction several ribs 27 whereby space between two adjacent ribs forms a groove, the cross section of the device fills the cross section of a duct in such a way that the duct walls lie on the ribs at a buckling point where inherently the walls cannot penetrate into the grooves, the grooves remain open and permeable for fluids when the device is bent, fluids can circulate through the grooves of the device, in the longitudinal direction the ribs are interrupted to allow the grooves to be connected by way of transverse connections, where such defines structures which are knobs, where the envelope of the ends of the ribs creates an envelope which matches the interior of the tube, the device

is deformable, and consists of a flexible polymer which is inherently elastic in nature, the envelope formed by the anti-buckling device in at least a portion of the length of the anti-buckling device corresponds essentially to the cross-section of the duct at the buckling or bending point. It would have been obvious to one skilled in the art to modify the ribs in Russo as modified to have transverse interruptions to form connections between ribs as suggested by Nichols which teaches the equivalence of providing devices with ribs that are continuous and ones that have interruptions to improve flexibility while retaining strength.

Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Russo in view of Shchervinsky as applied to claims 1, 7-9, 11, 13-17, 19, 20, and 22-24 above, and further in view of Wooters. The reference to Russo as modified discloses all of the recited structure with the exception of reinforcing a pipe that is supported by a ribbed member and forming the ribs to hold a tube therein. It appears that the reference to Russo teaches all of the recited structure as interpreted above, however, if it is considered that such does not recite grooves capable of accommodating a plastic pipe, then it would have been obvious to one skilled in the art to modify the ribs of Russo as modified to accommodate a plastic pipe as suggested by Wooters that shows plastic pipes can be provided in 60,62,64 can be provided inbetween ribs 54a-h in a support device where such allows for a plurality of multiple sized tubes to be protected by the device thereby increasing it's value, where it is considered that such would provide inherently reinforcement to that hose.

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Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Russo in view of Shchervinsky as applied to claims 1, 7-9, 11, 13-17, 19, 20, and 22-24 above, and further in view of Atwell. The reference to Russo as modified discloses all of the recited structure with the exception of forming the thin walled conduit with a woven layer. The patent to Atwell discloses that it is old and well known in the art to form thin walled ducts with a woven fabric layer to provide some strength to the wall. It would have been obvious to one skilled in the art to modify the thin walled conduit in Russo as modified by providing a woven layer to provide added strength as suggested by Atwell where such would prevent premature failure of the thin walled duct from rupture thereby saving money.

Response to Arguments

Applicant's arguments with respect to claims 1-5, 7-9, and 11-24 have been considered but are moot in view of the new ground(s) of rejection.

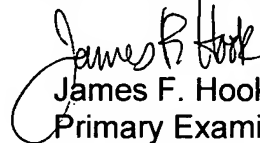
Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references to Berry, Jr., Phipps, Clark, Blake, Powell, Horner, Bartholomew, Kunze, Ziu, Matsuura, Spehalski, and Nothofer disclosing state of the art reinforcing devices.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James F. Hook whose telephone number is (571) 272-4903. The examiner can normally be reached on Monday to Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on (571) 272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


James F. Hook
Primary Examiner
Art Unit 3754

JFH